Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of intruder[['s]] detection, comprising of usage of more than 1 sensor, represented [[,for example,]] by ~~video~~ cameras that are arranged with fixed spatial orientation to form a stereo detector ~~at that~~ of 2D distributions of light intensity of a surveillance zone, that form stereo images registered by said stereo detector, [[are]] transmitting the stereo images to processing blocks, for ~~example, blocks of digital processing, at that mentioned blocks of digital processing~~ performing processing of a sequence of stereo images with different frequencies (high and low), for determining the presence of an intruder, a [[it's]] position of said intruder and a speed of transference of said intruder.

2. (currently amended) A method as defined in claim 1 ~~that differs in that they use the processor of detection of moving intruder that performs~~ wherein the processing includes the comparison of 2 or more consecutive images that are entering ~~this~~ the processing block with high frequency, for detection of a fast moving intruder.

3. (currently amended) A method as defined in claim 1 ~~that differs in that they use the processor of detection of static intruder that performs~~ wherein the processing includes measurement of 3D relief in the view field of the stereo detector, for detection of a slow moving [[(or static)]] or static intruder.

4. (currently amended) A method as defined ~~in claims 1 – 3~~ in claim 1 ~~that differs in that they perform~~ wherein the processing includes measurement of 3D relief by the processor of detection of a static intruder in the case of detection of possible intruder by the processor of detection of a moving intruder.

5. (currently amended) A method as defined ~~in claims 1 - 2~~ in claim 1 ~~that differs in that they~~ wherein the processing includes ~~determine the~~ determining a local measure of difference of elements that are visible on a stereo image, and ~~memorize~~ memorizing elements of the stereo image ~~for that~~ when the measured local value is more than a predetermined one in a storage device, while comparing 2 or more consequent images in the processor of detection of a moving intruder.

6. (currently amended) A method as defined ~~in claims 1 - 2~~ in claim 5 ~~that differs in that they~~ wherein the processing includes ~~perform~~ performing integration of closely set elements of stereo image into geometrical figures that are stored to the storage device ~~memory as in claim 5~~.

7. (currently amended) A method as defined ~~in claims 1 - 2 or claim 5~~ in claim 6 ~~that differs in that they~~ wherein the processing includes ~~determine the~~ determining a distance from stereo camera and ~~the~~ a geometrical size for every geometrical figure, ~~as in claim 6,~~ taking into account of a fixed positional relationship of sensors.

8. (currently amended) A method as defined ~~in claims 1 - 3 or claims 5 - 6~~ in claim 6 ~~that differs in that they~~ wherein the processing includes ~~compare~~ comparing geometrical figures as ~~in claim 6~~ with ~~the~~ a set of geometrical figures that were memorized in advance that ~~are describing~~ describe both ~~the~~ resolved objects and a possible intruder, and ~~they use~~ the scaling ~~(enlargement or lessening of figure as in claim 6)~~ of a figure in dependence of a measured distance between the stereo detector and the object ~~as in claim 7~~ that is represented by given figure and ~~they generate~~ generating an alarm signal ~~and perform the action as in claim 4~~ in case of coincidence with figure of possible intruder.

9. (currently amended) A method as defined ~~in claim 1 or claim 3~~ in claim 3 ~~that differs in that they perform the~~ wherein the processing includes searching of correspondent points in stereo image in the processor of detection of static intruder for measurement of 3D relief as ~~in claim 3~~ in view field of stereo camera, after that ~~they determine~~ determining the distance up to the elements of relief that are presented on stereo image using the known fixed positional relationship of the

sensors.

10. (currently amended) A method as defined ~~in claims 1 – 9~~ in claim 9 ~~that differs in that they perform the~~ wherein the processing includes memorization of 3D relief of scene thereto ~~they~~ memorize a series of a predetermined number of stereo images of the surveillance zone in absence of possible intruders, ~~they~~ performing measurement of distances up to elements that are presented on the stereo image ~~as in claim 9, they average of~~ averaging the measured distances on the series of stereo images and ~~memorize~~ memorizing the obtained relief in the storage device.

11. (currently amended) A method as defined ~~in claim 1 or claim 3~~ in claim 6 ~~that differs in that they~~ wherein the processing includes performing a comparison of 3D relief that was measured elementwise ~~as in claim 9~~ with relief that was measured in advance in absence of intruder and memorized in a storage device ~~as in claim 10~~ in the processor of the detection of a static intruder, and ~~they memorize~~ memorizing elements of relief for whose the distinction differs from visible elements of relief that are saved to memory on a value that is more than predetermined one, as a result of comparison.

12. (currently amended) A method as defined ~~in claim 1 or claim 3 or claim 9~~ in claim 11 ~~that differs in that they~~ wherein the processing includes performing the integration of closely set elements of stereo image that are saved to memory of the device ~~as in claim 11~~ into the geometrical figures.

13. (currently amended) A method as defined ~~in claim 1 or claim 3 or claim 9~~ in claim 12 ~~that differs in that they~~ wherein the processing includes performing the comparison of parameters of geometrical figures that are distinguished ~~as in claim 12~~ with corresponding geometrical parameters of human body that are known in advance, and ~~they make the~~ thereby making a decision about the appearance of intruder.

14. (currently amended) A method as defined ~~in claims 1 – 13~~ in claim 13 ~~that differs in that they~~

wherein the processing includes performing ~~the~~ an initial calibration ~~before accomplishment of claims 1 – 13~~ that consists ~~in~~ of saving to memory of series of stereo images of an object with known geometrical characteristics , measuring of corresponding geometrical characteristics, comparing ~~of~~ the measured characteristics with known ones and determining of corresponding corrections ~~at that they~~ used to perform the calibration again in the case of change of positional relationship of sensors of stereo detector.

15. (original) A device for intruder detection that includes more than one signal sensor, signal processor and executive block that differs in that they install coupled video cameras as a signal sensor, the dynamic signal preprocessor that is extra inserted into the processor whose input is connected to output of the first sensor, and output is connected to input of extra inserted moving object detector and input of extra inserted first static preprocessor, at the same time the second input of the moving objects detector is connected to output of the second dynamic signal preprocessor whose input is connected to output of the second sensor whose second output is connected to input of second static preprocessor whose second input is connected to second output of second dynamic preprocessor and the third input of moving objects detector is connected to the output of control panel whose second output is connected to the first input of static decision performer whose second input is connected to output of dynamic decision performer whose input is connected to output of moving objects detector at that outputs of first and second static preprocessors are connected to the first input of extra inserted reconstructor of 3D scene whose second input is connected to extra inserted 3D objects calibrator and output is connected to extra inserted 3D objects detector whose output is connected to the third input of static decision performer whose output is connected to executive device of alarm signal creation.